REMARKS

Claims 1-2, 4-6 and 10-11 were rejected under 35 U.S.C. § 103(a) as unpatentable over Rodrigues et al. (U.S. Patent Application Publication 2002/0100122A1) in view of Nakatsu et al. (U.S. Patent 5,965,518). Applicant traverses this rejection.

Rodrigues et al. is cited for describing dilute fabric softener formulations. These feature hydroxyl urea compounds. Perfume is included in a number of the Examples. None of these "perfumes" is broken down into their constituents.

Nakatsu et al. describes fragrance compositions with antimicrobial activity. These are reported in two paragraphs. They stretch from column 3 (line 25) to column 4 (line 5). The second of these paragraphs focuses on essential and non-essential oils. These oils are mixtures of many many ingredients. Among the approximately 30 oils are such materials as anise oil, bay oil terpineless, clove bud, clove leaf, clove oil, clove stem, origanum oil, Peru balsam, pimento oil, and thyme oil. All are described as phenolic containing substances. Also examples of non-aromatic terpinoids are mentioned. These include buchu oil, caraway oil, carrot seed, cedar leaf, citronella oil, citrus oil, copaiba oil, geranium oil, gergamot, lavender oil, mint oil, orange oil, parsley oil, patchouly oil, pine oil, rosemary oil, sage oil, tegette oil, and ylang ylang.

There has been no identification by the Examiner as to whether or how much of any conjugated olefinic double bond organic material is present in any of the listed substances.

The first paragraph of fragrance description at column 3 includes about ten highly generic classes of compounds. These are stated to be esters, aldehydes, alcohols, ketones, terpinenes, ethers, acetals, nitrites, essential oils, heterocyclic nitrogen-containing compounds or sulfur containing compounds. See column 3, lines 25-32. Thereafter, is a section giving Examples of phenolic fragrances. These are listed as including amyl salicylate, cavacrol, dihydroeugenol, eugenol, hexyl eugenol, hexyl salicylate, isoeugenol, methyl eugenol, methyl isoeugenol, methyl salicylate, tert butyl cresol, thymol, and vanillin. None of these appear to be unsaturated organic materials having at least two olefinic double bonds in conjugated relationship, particularly one susceptible to degradation into a color bearing substance.

Within the larger disclosure noted above, the Examiner has done her own selection focusing only on column 3, lines 37-45. Therein are listed Examples of non-aromatic terpenoid compounds. They are 24 in number. From this list, the only possibility of a conjugated double bond olefinic material is found in the listing "phellendrene" and "terpinene". There are three isomers of terpinene. These are alpha-, beta- and gamma- terpinene. Only the alpha-terpinene has conjugated double bonds, the others are non-conjugated di-olefinic structures. Consequently, the only unambigiously identified unsaturated organic material

with at least two olefinic conjugated double bonds is phellendrene. No particular significance is given to phellendrene. The substance is buried in a very very large list of fragrance materials (not merely the 24 non-aromatic terpenoids but also a full two paragraph listing between columns 3-4).

Fragrance formulations are found in Tables 1-5 of Nakatsu et al. Phellendrene is a tiny component of the Table 3 fragrance identified as AMPAT-C. None of the other fragrance formulations appear to have any easily identifiable conjugated double bond constituent. Table 6 provides comparative antimicrobial activity data for each of the AMPAT formulas. AMPAT-C is a weak sister to the other AMPAT formulas. In particular, AMPAT-C is not particularly effective against *E. Coli*. Note column 6 (lines 18-19). A skilled chemist seeing the results of Table 6 would probably not select AMPAT-C given the somewhat better performance of the AMPAT fragrances A, B and E. Curiously the only AMPAT formula containing a conjugated double bond constituent (phellendrene) is not superior and arguably inferior to the other fragrance formulations.

A skilled chemist seeking to improve the Rodrigues et al. fabric softening formulations would have a tremendous number of fragrance possibilities of to choose from. Even if it were desirable to select antimicrobial actives as reported by Nakatsu et al., it is statistically highly unlikely that a perfume defined by Nakatsu et al. would be selected containing an unsaturated conjugated double bond substance. Indeed, there are hints that conjugated unsaturated

substances (e.g. phellendrene) might not be suitable. Applicant considers that the Examiner simply has not presented a *prima facie* case of obviousness.

Claims 1 and 12 were rejected under 35 U.S.C. § 103(a) as unpatentable over Rodrigues et al. (U.S. Patent Application Publication 2004/0266921) in view of Nakatsu et al. (U.S. Patent 5,965,518). Applicant traverses this rejection.

Rodrigues et al. was cited for revealing hydroxyalkyl urea in an aqueous-based polymer composition to maintain hydration. The word "fragrances" is found in a list of adjuvent materials. There is no characterization of the fragrance constituents.

Nakatsu et al. was again cited for supplying the fragrance that contained an unsaturated organic material having at least two olefinic conjugated double bonds.

Applicant understands that there might be motivation to select a perfume that has antimicrobial activity for incorporation into Rodrigues et al. Where the Examiner's motivation argument has flaws is that Nakatsu et al. cannot attribute any antimicrobial action to an unsaturated organic material having at least two olefinic conjugated double bonds. According to the reference, a fragrance composition requires 3-20% phenolic compounds and 20-80% non-aromatic terpenoids to achieve antimicrobial activity. Further it is necessary for this fragrance composition to pass an Odor Intensity Index of less than 100 and an

Odor Evaluation Acceptability Index of greater than 50. But none of this suggests that a constituent with a conjugated olefinic double bond provides such activity.

The only substance clearly identifiable as an unsaturated organic material with at least two olefinic conjugated double bonds is that of phellendrene. One of the five exemplified fragrance formulations incorporates phellendrene. It is found at 1.65% in Table 3 under the formulation AMPAT-C. The other four AMPAT formulas –A, -B and –E are outlined in the respective Tables 1, 2 and 5. Other than the control, AMPAT-D, the weakest of the fragrance formulations is AMPAT-C. It is only modestly effective against a significant microbe which is *E. Coli*. Note Table 6 and column 6 (lines 18-19). If there were any motivation to begin with, the skilled chemist carefully reading Nakatsu et al. would tend to avoid formulas that had components similar to AMPAT-C. One of these desirably avoidable components would necessarily be phellendrene, an unsaturated organic material with two olefinic conjugated double bonds.

There are countless fragrance constituents available to the perfume chemist. Very few meet the conjugated double bond criteria. There would be no particular motivation to select these particular structures. Certainly the Nakatsu et al. reference does not provide a form to showcase such substances. If anything, doubt might arise for use of the only exemplified conjugated double bond constituent phellendrene.

In view of the foregoing comments, applicant requests the Examiner to reconsider the rejection and now allow the claims.

Respectfully submitted,

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